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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,552	08/16/2001	Michael Russell	MUR-8577	4251

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EXAMINER

PATIDAR, JAY M

ART UNIT

PAPER NUMBER

2862

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/931,552

Applicant(s)

RUSSELL, MICHAEL

Examiner

Jay M. Patidar

Art Unit

2862

-- Th MAILING DATE of this communication appears on the cover sheet with the correspond nce address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 10 is/are rejected.
- 7) ☒ Claim(s) 2 and 6-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The disclosure is objected to because of the following informalities:

The term "notional" at line 28, page 3 needs to be corrected; OX is not the rotating axis as described at line 14, page 7; "rotationally stationary" at line 2, page 7 does not make sense;

It is not clearly defined in the specification as to what type of sensor is used for vector sensor 14.

Appropriate correction is required.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the sleeve having aperture to permit detection of gamma radiation, as set forth in claim 9 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. Claims are objected to because of the following informalities:

In claim 2, the phrase "in the vicinity of the assembly of the earth's local magnetic field or gravitational field" is not clearly understood;

In claim 8, there are no equations defined in the claim;

In claim 4, it is vague as to how a coil generates a pulse train; it is also vague from the language of the claim as to what the coil is; is it either vector sensor or signal generator?

Appropriate correction is required.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3-5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cobern in view of Yoshimura.

Cobern discloses a rotary assembly with a rotatable shaft 61, an earth vector sensor 56 and an orientation signal generator for generating a pulse train to measure the position of the shaft (Figs. 2,3). Cobern fails to show a sleeve with ferromagnetic elements. Yoshimura discloses this feature. Yoshimura

discloses a plurality of ferromagnetic elements around the circumference of the sleeve 12 on the shaft 11 (Note fig. 7A). Yoshimura discloses the sensor being stationary. In order to measure the rotational position of the object either sensor or encoder be stationary. The use of the encoder on the shaft to measure the angular position of the rotating object with the magnetic field sensor is known in the art. The encoder with ferromagnetic elements or N-S poles or teeth or slots functionally provides the same results. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Cobern to have included an encoder on the sleeve as taught by Yoshimura to measure the angular position of the shaft. The method claim recited for using the apparatus in claim 10 is an inherent use of the apparatus of Cobern in view of Yoshimura and is rejected on the same grounds. One of ordinary skill would find it inherent that the apparatus of Cobern modified with Yoshimura operates in the functional manner claimed by applicant.

6. Claims 2,6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

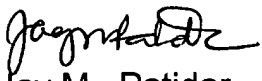
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Leichle; Gee et al.; Ackermann et al. ; and Wolf are cited to show a device for measuring an angular position using an encoder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay M. Patidar whose telephone number is 703-308-6723. The examiner can normally be reached on M-Thur 7:00-5:30.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0956.

  
Jay M. Patidar  
Primary Examiner  
Tech Center 2862  
September 11, 2003